

## CHAPTER 1 SECTION 19.1

# NON-INVASIVE PERIPHERAL VASCULAR DIAGNOSTIC STUDIES: CEREBROVASCULAR ARTERIAL STUDIES

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### I. PROCEDURE CODE RANGE

93875 through 93882

### II. POLICY

Procedures within this code range may be cost-shared when medically necessary and appropriate. Reimbursement for color-enhanced procedures such as color coded duplex sonography, color flow Doppler ultrasound, or angiodynography will not exceed the rate for CPT code 93875.

### III. POLICY CONSIDERATIONS

#### A. General.

1. Clinical indications listed are not all-inclusive. Procedures accomplished for non-listed indications, which are not otherwise excluded, may be cost-shared when medically necessary and appropriate.

2. Cerebrovascular arterial studies are used to determine if carotid arteries are probable cause of symptoms (stenosis or ulceration); to diagnosis severe stenosis (greater than 60% diameter or greater than 84% cross sectional area) which may require surgery; for follow-up care to determine if condition is progressive or stable; or to image carotid body tumor or aneurysm.

B. Clinical Indications. All of the following clinical indications apply to CPT codes 93875, 93880 and 93882.

1. Asymptomatic bruit (stenosis).

2. ICD-9-CM 437.9: Atypical central nervous system (CNS) symptoms (nonfocal symptoms such as vertigo, syncope, motor disorders, gait disturbances or diplopia).

3. ICD-9-CM 430; 431; 432.9; 435.8; 435.9; 437.1; or 437.9: CNS symptoms (focal symptoms such as transischemic attack [TIA], cerebrovascular accident [CVA], reversible ischemic neurologic event, monocular visual impairment).

4. ICD-9-CM 433.1; 433.3: Head and neck tumors or surgery involving the carotids or jugular vein.

5. ICD-9-CM 430; 431; 433.1; 433.3: Intraoperative monitoring (Oculoplethysmography [OPG] or Duplex ultrasound scanning)

6. ICD-9-CM 430; 431; 433.1; 433.3: Postoperative carotid or vascular surgery follow-up.

7. ICD-9-CM 430; 433.1; 433.3; 437.0; 437.9: Cerebrovascular screen for patients undergoing major operations in vascular, cardiovascular or other fields, and patients with multiple risk factors for arteriosclerotic disease.

C. Technology.

1. Non-imaging

a. Indirect methods (hemodynamic information): (A) Doppler periorbital examination; (B) Oculoplethysmography (OPG)

b. Direct methods (physiologic studies based on flow): (A) Carotid bruit analysis (evaluates sound and frequency); (B) Carotid velocity patterns (wave form analysis - continuous-wave Doppler detector (ratio of systolic and diastolic frequency or spectral analysis).

2. Imaging

a. Doppler imaging and velocity signal analysis (imaging for flow map) by pulsed Doppler system or continuous-wave Doppler detector.

b. B-mode scan (carotid real time ultrasound imaging without Doppler velocity information)

c. Duplex scanning (B-Mode scan carotid real time ultrasound imaging with Doppler velocity information).

D. Frequency. Case-specific, dependent upon the need for follow-up.

E. Utilization Review. A claim for a cerebrovascular arterial study which meets any of the following criteria must be referred to contractor second level review.

1. Periorbital directional Doppler procedure, while generally acceptable technology, provides low sensitivity relative to newer technology. Multiple cerebrovascular arterial study-procedures within an episode of care shall be reviewed to determine whether the initial use of a more sensitive procedure would have made the less sensitive procedure(s) unnecessary. When the contractor finds the initial use of a more sensitive procedure medically reasonable and adequate, the claim for the extraneous periorbital directional Doppler procedure should be denied as not medically necessary.

2. Multiple repetitions of study procedure. Repetition of the same study-procedure for a beneficiary, performed within an expected episode of care, suggests the possibility of over-utilization. Contractor review shall confirm that the third and subsequent repetitions of a study-procedure for a specific beneficiary is medically indicated.

3. Procedure accomplished for non-listed clinical indication. When the indication is not specifically excluded, contractor review should document the clinical basis for denial when the type of information produced by the procedure is not material to diagnosis of the suspect condition. When contractor review determines that the type of information produced by the procedure is material to diagnosis of the suspect condition, the contractor should forward their recommendation for clinical indications, technology, and utilization review standards, to the TMA for a policy benefit status determination.

#### IV. EXCLUSIONS

- A. In conjunction with podiatry services are excluded.
- B. Carotid bruit analysis is excluded.

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